

IN THE CLAIMS:

SUB C7
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5. (Amended) A composition of matter comprising a plurality of polynucleotides selected from cDNA molecules or genomic DNA fragments, said composition including a mixture of microparticles, wherein each microparticle ~~having~~ has polynucleotides of the plurality ~~[a population]~~ attached thereto and wherein ~~[such that]~~ substantially all different polynucleotides in the plurality ~~[population]~~ are attached to different microparticles.

~~Please cancel claim 7.~~

SUB C8
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8. (Amended) The composition of claim [7] 5 wherein said plurality ~~[population of said cDNAs has a size of from]~~ includes from ten to a hundred thousand cDNAs or genomic DNA fragments.

9. (Amended) The composition of claim [7] 5 wherein tag complements are attached to each of said microparticles of said mixture and wherein each of said cDNAs or genomic DNA fragments of said plurality ~~[population]~~ has an oligonucleotide tag attached such that perfectly matched duplexes are formed between the tag complements of said microparticles and the oligonucleotide tags of said cDNAs or genomic DNA fragments.

REMARKS

Claims 5, 8, and 9 have been amended, and claim 7 has been canceled. Claims 1-6 and 8-13 are pending in the application.

The amendment to claim 5 clarifies that the polynucleotides on the microparticles are either cDNAs or genomic fragments. Bases for the amendment to claim 5 are the sections entitled "Attaching Target Polynucleotides [to] Microparticles," (Col. 14, line 14, to Col. 16, line 57); the section entitled "Parallel sequencing," (Col. 21, line 53, to Col. 23, line 57), and Example 2 entitled "Parallel sequencing of SV40 fragments," (Col. 24, line 64, to Col. 25, line 67), which describe the attachment of genomic fragments to microparticles for parallel sequencing.

The amendment to the specification corrects the mis-labeling of the T4 DNA polymerase activity used in the process of rendering a tag single stranded. The description of T4 DNA polymerase attached as Exhibit A states that the enzyme has no 5'→3' nuclease activity. "3'→5'" was intended by the inventor.

No new matter has been added by the amendments. Reconsideration is respectfully requested.